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## **Appendix G**

### **Long-term Trends by Industry, 1988-2001**

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## Appendix G – Long-term Trends by Industry, 1988-2001

**Table G-1: TRI Total Releases, by Industry, 1995 and 1998-2001**

SIC Code Industry	Total Releases On- and Off-site							
	1995	1998	2000	2001	Change 2000-2001		Change 1995-2001	
	Pounds	Pounds	Pounds	Pounds	Pounds	Percent	Pounds	Percent
20 Food	126,032,013	133,528,619	129,487,938	124,869,382	-4,618,557	-3.6	-1,162,632	-0.9
21 Tobacco	2,142,358	3,618,629	3,149,255	3,555,777	406,522	12.9	1,413,419	66.0
22 Textiles	18,777,991	12,099,716	8,196,293	6,876,767	-1,319,526	-16.1	-11,901,224	-63.4
23 Apparel	1,355,583	602,859	565,353	401,151	-164,202	-29.0	-954,432	-70.4
24 Lumber	36,153,353	35,389,103	34,578,288	31,357,541	-3,220,747	-9.3	-4,795,812	-13.3
25 Furniture	42,659,519	17,308,841	12,326,031	7,995,593	-4,330,438	-35.1	-34,663,926	-81.3
26 Paper	241,465,911	232,746,501	227,043,504	194,645,017	-32,398,488	-14.3	-46,820,894	-19.4
27 Printing	31,360,959	22,525,999	19,006,267	19,683,174	676,907	3.6	-11,677,785	-37.2
28 Chemicals	828,847,339	723,476,600	665,397,062	564,960,174	-100,436,889	-15.1	-263,887,165	-31.8
29 Petroleum	66,502,911	163,660,407	73,669,417	70,370,453	-3,298,964	-4.5	3,867,542	5.8
30 Plastics	128,027,753	112,662,561	107,195,780	88,132,838	-19,062,942	-17.8	-39,894,915	-31.2
31 Leather	4,851,489	4,835,113	3,624,907	2,614,654	-1,010,252	-27.9	-2,236,835	-46.1
32 Stone/Clay/Glass	34,095,325	42,205,191	41,452,102	38,215,324	-3,236,778	-7.8	4,119,999	12.1
33 Primary Metals	538,343,447	675,476,785	631,803,145	568,790,649	-63,012,496	-10.0	30,447,202	5.7
34 Fabricated Metals	106,850,683	87,657,361	77,758,739	64,720,754	-13,037,985	-16.8	-42,129,929	-39.4
35 Machinery	27,852,782	21,493,635	19,457,233	15,351,790	-4,105,444	-21.1	-12,500,992	-44.9
36 Electrical Equip.	43,805,911	32,155,505	32,865,733	22,924,099	-9,941,634	-30.2	-20,881,812	-47.7
37 Transportation Equip.	123,377,260	102,859,926	96,805,488	80,400,734	-16,404,754	-16.9	-42,976,526	-34.8
38 Measure/Photo.	17,687,028	12,432,259	9,367,249	9,352,391	-14,858	-0.2	-8,334,637	-47.1
39 Miscellaneous	13,964,668	10,450,873	8,882,545	8,448,809	-433,736	-4.9	-5,515,859	-39.5
-- Multiple codes 20-39	157,610,046	127,980,605	125,125,172	103,012,317	-22,112,855	-17.7	-54,597,729	-34.6
-- No codes 20-39	15,380,962	6,486,370	8,496,634	11,347,431	2,850,797	33.6	-4,033,531	-26.2
<b>Total</b>	<b>2,607,145,291</b>	<b>2,581,653,456</b>	<b>2,336,254,137</b>	<b>2,038,026,819</b>	<b>-298,227,318</b>	<b>-12.8</b>	<b>-569,118,472</b>	<b>-21.8</b>

**Note:** Does not include delisted chemicals, PBT chemicals, vanadium and vanadium compounds. **On-site Releases** are from Section 5 of Form R. **Off-site Releases** are from Section 6 (transfers off-site to disposal) of Form R. **Off-site Releases** include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. For the years 1998 and after, does not include industries, other than manufacturing industries, that are required to report for 1998 and later years only.

**Table G-2: TRI Total Releases, by Industry, 1988 and 1998-2001**

SIC Code Industry	Total Releases On- and Off-site							
	1988	1998	2000	2001	Change 2000-2001		Change 1988-2001	
	Pounds	Pounds	Pounds	Pounds	Pounds	Percent	Pounds	Percent
20 Food	6,933,694	14,194,881	9,837,644	8,941,407	-896,237	-9.1	2,007,713	29.0
21 Tobacco	214,464	185,062	76,013	74,354	-1,659	-2.2	-140,110	-65.3
22 Textiles	36,764,515	10,256,225	6,827,098	5,761,962	-1,065,136	-15.6	-31,002,553	-84.3
23 Apparel	951,662	385,976	282,189	229,131	-53,058	-18.8	-722,531	-75.9
24 Lumber	32,846,908	32,405,698	31,725,202	29,674,357	-2,050,845	-6.5	-3,172,551	-9.7
25 Furniture	62,181,722	17,007,214	12,080,018	7,872,708	-4,207,310	-34.8	-54,309,014	-87.3
26 Paper	205,114,369	175,754,114	171,542,417	146,129,068	-25,413,349	-14.8	-58,985,301	-28.8
27 Printing	56,538,794	22,312,923	18,835,901	19,512,168	676,267	3.6	-37,026,626	-65.5
28 Chemicals	876,796,865	424,226,839	385,904,328	336,978,365	-48,925,962	-12.7	-539,818,500	-61.6
29 Petroleum	73,411,402	129,117,129	35,260,219	31,621,986	-3,638,233	-10.3	-41,789,416	-56.9
30 Plastics	159,936,426	100,204,129	96,581,791	77,206,667	-19,375,123	-20.1	-82,729,758	-51.7
31 Leather	10,089,020	4,266,247	3,046,595	2,190,120	-856,474	-28.1	-7,898,900	-78.3
32 Stone/Clay/Glass	34,895,576	25,851,605	24,921,652	21,861,352	-3,060,300	-12.3	-13,034,224	-37.4
33 Primary Metals	605,145,767	589,995,378	540,369,135	503,701,622	-36,667,513	-6.8	-101,444,145	-16.8
34 Fabricated Metals	158,298,387	80,312,301	70,223,065	57,444,004	-12,779,061	-18.2	-100,854,383	-63.7
35 Machinery	70,743,712	18,139,545	16,966,425	12,908,551	-4,057,875	-23.9	-57,835,161	-81.8
36 Electrical Equip.	124,982,923	22,540,946	21,945,322	15,607,773	-6,337,549	-28.9	-109,375,150	-87.5
37 Transportation Equip.	212,008,391	96,637,404	90,499,953	74,712,175	-15,787,778	-17.4	-137,296,216	-64.8
38 Measure/Photo.	56,609,556	6,921,581	4,495,093	3,814,878	-680,215	-15.1	-52,794,678	-93.3
39 Miscellaneous	31,771,975	10,017,639	8,134,512	7,391,328	-743,184	-9.1	-24,380,647	-76.7
-- Multiple codes 20-39	299,429,463	87,847,472	83,237,145	63,525,143	-19,712,002	-23.7	-235,904,320	-78.8
-- No codes 20-39	38,064,082	4,388,781	6,251,253	8,565,124	2,313,871	37.0	-29,498,958	-77.5
<b>Total</b>	<b>3,153,729,673</b>	<b>1,872,969,088</b>	<b>1,639,042,971</b>	<b>1,435,724,244</b>	<b>-203,318,727</b>	<b>-12.4</b>	<b>-1,718,005,429</b>	<b>-54.5</b>

**Note:** Does not include delisted chemicals, chemicals added in 1990, 1994 and 1995, aluminum oxide, ammonia, hydrochloric acid, PBT chemicals, sulfuric acid, vanadium and vanadium compounds. **On-site Releases** are from Section 5 of Form R. **Off-site Releases** are from Section 6 (transfers off-site to disposal) of Form R. **Off-site Releases** include metals and metal category compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. For the years 1998 and after, does not include industries, other than manufacturing industries, that are required to report for 1998 and later years only.



Table G-3: Total Production-related Waste Managed, by Industry, 1995 and 1998-2001

SIC Code Industry	Total Production-related Waste Managed							
	1995	1998	2000	2001	Change 2000-2001		Change 1995-2001	
	Pounds	Pounds	Pounds	Pounds	Pounds	Percent	Pounds	Percent
20 Food	4,138,020,080	1,089,073,581	600,427,195	1,088,676,460	488,249,265	81.3	-3,049,343,620	-73.7
21 Tobacco	3,061,366	5,907,399	5,300,257	5,302,236	1,979	0.0	2,240,870	73.2
22 Textiles	54,968,221	49,293,935	44,062,732	40,578,139	-3,484,593	-7.9	-14,390,082	-26.2
23 Apparel	2,229,053	1,920,919	1,895,870	1,803,385	-92,485	-4.9	-425,668	-19.1
24 Lumber	112,549,987	63,493,916	175,413,059	68,470,249	-106,942,811	-61.0	-44,079,738	-39.2
25 Furniture	60,744,336	32,957,866	23,968,255	14,997,034	-8,971,221	-37.4	-45,747,302	-75.3
26 Paper	1,758,766,585	1,476,450,418	1,479,788,509	1,373,244,775	-106,543,734	-7.2	-385,521,810	-21.9
27 Printing	294,975,082	300,646,333	365,351,767	370,475,455	5,123,688	1.4	75,500,373	25.6
28 Chemicals	9,467,127,337	10,336,213,842	15,724,070,676	10,660,684,644	-5,063,386,032	-32.2	1,193,557,307	12.6
29 Petroleum	946,477,071	1,053,354,400	830,433,364	874,957,447	44,524,083	5.4	-71,519,624	-7.6
30 Plastics	294,749,986	260,807,868	225,897,970	203,876,026	-22,021,944	-9.7	-90,873,960	-30.8
31 Leather	10,331,453	10,760,483	17,972,644	8,406,552	-9,566,092	-53.2	-1,924,901	-18.6
32 Stone/Clay/Glass	765,400,195	696,976,031	616,620,095	566,829,148	-49,790,947	-8.1	-198,571,047	-25.9
33 Primary Metals	3,721,854,285	3,081,686,210	3,509,833,346	2,651,415,299	-858,418,048	-24.5	-1,070,438,986	-28.8
34 Fabricated Metals	748,699,390	708,983,457	719,061,580	648,357,622	-70,703,959	-9.8	-100,341,768	-13.4
35 Machinery	169,626,199	148,537,242	139,943,299	127,291,913	-12,651,386	-9.0	-42,334,286	-25.0
36 Electrical Equip.	361,864,284	410,723,885	405,106,370	309,059,826	-96,046,544	-23.7	-52,804,458	-14.6
37 Transportation Equip.	389,872,292	302,423,453	282,620,688	253,088,358	-29,532,330	-10.4	-136,783,934	-35.1
38 Measure/Photo.	79,195,911	75,104,565	69,278,227	61,971,990	-7,306,236	-10.5	-17,223,921	-21.7
39 Miscellaneous	52,221,619	50,848,238	42,595,503	40,644,907	-1,950,597	-4.6	-11,576,712	-22.2
-- Multiple codes 20-39	1,788,072,315	1,074,551,644	1,343,644,331	943,612,660	-400,031,672	-29.8	-844,459,655	-47.2
-- No codes 20-39	114,614,139	30,712,834	24,814,899	23,947,941	-866,957	-3.5	-90,666,198	-79.1
<b>Total</b>	<b>25,335,421,186</b>	<b>21,261,428,518</b>	<b>26,648,100,637</b>	<b>20,337,692,065</b>	<b>-6,310,408,572</b>	<b>-23.7</b>	<b>-4,997,729,120</b>	<b>-19.7</b>

**Note:** Does not include delisted chemicals, PBT chemicals, vanadium and vanadium compounds. For the years 1998 and after, does not include industries, other than manufacturing industries, that are required to report for 1998 and later years only. Data are from Section 8 of Form R of year indicated.

Table G-4: Total Production-related Waste Managed, by Industry, 1991 and 1998-2001

SIC Code Industry	Total Production-related Waste Managed							
	1991	1998	2000	2001	Change 2000-2001		Change 1991-2001	
	Pounds	Pounds	Pounds	Pounds	Pounds	Percent	Pounds	Percent
20 Food	32,999,426	73,607,746	65,798,548	72,996,697	7,198,149	10.9	39,997,271	121.2
21 Tobacco	51,388,971	203,097	121,856	103,195	-18,661	-15.3	-51,285,776	-99.8
22 Textiles	46,359,366	42,526,821	37,322,037	35,396,289	-1,925,748	-5.2	-10,963,077	-23.6
23 Apparel	2,284,755	1,632,284	1,538,261	1,565,857	27,596	1.8	-718,898	-31.5
24 Lumber	59,908,971	60,850,126	172,704,607	66,536,320	-106,168,288	-61.5	6,627,349	11.1
25 Furniture	61,313,913	32,475,514	23,594,010	14,786,786	-8,807,224	-37.3	-46,527,127	-75.9
26 Paper	1,381,495,014	1,279,180,742	1,289,804,351	1,211,621,393	-78,182,958	-6.1	-169,873,621	-12.3
27 Printing	258,845,384	299,333,836	363,317,375	368,224,419	4,907,044	1.4	109,379,035	42.3
28 Chemicals	6,848,386,194	8,422,199,877	12,908,489,174	8,756,222,262	-4,152,266,911	-32.2	1,907,836,068	27.9
29 Petroleum	1,165,844,926	862,852,090	630,596,947	593,939,915	-36,657,032	-5.8	-571,905,011	-49.1
30 Plastics	290,503,492	233,325,331	200,476,299	180,193,050	-20,283,249	-10.1	-110,310,442	-38.0
31 Leather	17,878,399	6,361,954	14,134,988	5,053,010	-9,081,978	-64.3	-12,825,389	-71.7
32 Stone/Clay/Glass	928,431,948	658,764,212	565,166,558	517,518,547	-47,648,011	-8.4	-410,913,401	-44.3
33 Primary Metals	1,938,982,427	2,734,557,510	3,147,763,417	2,469,444,307	-678,319,111	-21.5	530,461,880	27.4
34 Fabricated Metals	570,540,457	665,922,843	676,419,737	610,328,287	-66,091,450	-9.8	39,787,830	7.0
35 Machinery	260,696,519	136,593,162	130,269,191	118,545,022	-11,724,169	-9.0	-142,151,497	-54.5
36 Electrical Equip.	343,323,963	306,990,047	322,048,768	250,279,959	-71,768,809	-22.3	-93,044,004	-27.1
37 Transportation Equip.	368,381,654	281,389,447	264,568,161	235,741,996	-28,826,165	-10.9	-132,639,658	-36.0
38 Measure/Photo.	116,026,519	63,075,456	58,564,000	51,943,157	-6,620,842	-11.3	-64,083,362	-55.2
39 Miscellaneous	62,851,466	47,938,464	40,034,731	37,927,656	-2,107,076	-5.3	-24,923,810	-39.7
-- Multiple codes 20-39	1,764,107,429	865,008,134	1,172,369,511	773,994,968	-398,374,544	-34.0	-990,112,461	-56.1
-- No codes 20-39	202,796,311	25,477,481	19,593,336	17,177,901	-2,415,435	-12.3	-185,618,410	-91.5
<b>Total</b>	<b>16,773,347,504</b>	<b>17,100,266,173</b>	<b>22,104,695,864</b>	<b>16,389,540,994</b>	<b>-5,715,154,870</b>	<b>-25.9</b>	<b>-383,806,511</b>	<b>-2.3</b>

**Note:** Does not include delisted chemicals, chemicals added in 1994 and 1995, ammonia, hydrochloric acid, PBT chemicals, sulfuric acid, vanadium and vanadium compounds. For the years 1998 and after, does not include industries, other than manufacturing industries, that are required to report for 1998 and later years only. Data are from Section 8 of Form R of year indicated.